# water USTRAFER

Our water is SAFE!



W B

Learn about Green College Station

Get WaterWise



H<sub>2</sub>O lingo

**Know the** 



# Water Wise

# Get answers to these common questions

# Q: What exactly is in my drinking water? Anything I should be concerned about?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

# Q: I have a weakened immune system. What do I need to know about drinking water?

If you have a weakened immune system, you may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections.

You should seek advice about drinking water from your physician or local health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791 or online at www.epa.gov/safewater.

### Q: Where does my water come from? How is it treated?

College Station relies entirely on groundwater for its drinking water supply. Water is pumped from six deep wells drilled in the Simsboro Sand, which is approximately 3,000 feet deep in the Carrizo-Wilcox Aquifer group. Because of this depth, the water temperature is 118° Fahrenheit when it is pumped from underground. Cooling towers at the Sandy Point Pump Station reduce the temperature to about 85° Fahrenheit.

The groundwater travels approximately 13 miles from Sandy Point Pump Station to the Dowling Road Pump Station, where we add chlorine to disinfect the water. Ground storage tanks at Dowling Road provide a total of 8 million gallons of water storage for high demand periods.

After the water is disinfected, it is ready to go into the distribution system, which includes two elevated storage tanks. The elevated storage tanks are what provides water pressure and provide additional water storage for peak demand periods and for fire protection.

### Q: If my water looks dirty or "rusty," is it safe to drink?

Contaminants may be found in drinking water that may cause taste, color, or odor problems. Occasionally water may become discolored due to a water line break. These types of problems are not necessarily causes for health concerns.

If you experience discolored water, please report it to Utility Dispatch (24 hours) at 764-3638 so that we may promptly correct the problem. For more information on taste, odor, or color of drinking water, please contact College Station Utilities at (979) 764-3660.



#### A NOTE About Bottled Water...

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Food and Drug Administration (FDA) regulations establish limits for bottled water which must provide the same protection for public health as the EPA's limits. When drinking water meets all Federal and State standards, as College Station's water does, there may not be any health-based benefits to purchasing bottled water or point-of-use devices.



### COLLEGE STATION UTILITIES WATER SERVICES

David Coleman Director Jennifer Nations Water Resources Coordinator

#### **CITY COUNCIL**

Ben White Mayor
John Crompton Place I
James Massey Place 2
Dennis Maloney Place 3
Lynn McIlhaney Place 4
Lawrence Stewart Place 5
David Ruesink Place 6

Glenn Brown **City Manager** Kathy Merrill **Assistant City Manager** 

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#### Q: What is my water tested for, and how often?

The State of Texas requires College Station to monitor your drinking water for over 100 different contaminants. Depending on the contaminant and regulations for that contaminant, the monitoring schedule could be monthly, quarterly, annually and in some cases less frequently. Below is a summary of what College Station's water is monitored for, and how often.

Contaminant	Schedule	Last Sample	Next Sample
Total Coliform Bacteria	Monthly	2007	2008
Disinfectant Residual	Quarterly	2007	2008
Disinfection Byproducts	Annually	2007	2008
Nitrates, Minerals, Radioactivity	Every 3 years	2005	2008
Lead & Copper	Every 3 years	2007	2010
Metals, Volatile Organic Compounds	Every 6 years	2002	2008

#### Q: What other substances are in my water?

The table below lists amounts of other substances for which College Station's water is tested. The Secondary Maximum Contaminant Levels (SMCL) are not enforced, but rather are intended as guidelines. These items primarily affect aesthetic qualities relating to drinking water.

Substance	Year Sampled	Highest Detected Levels	Secondary Limit
Aluminum	2002	0.008 ppm	50 ppm
Bicarbonate	2005	459 ppm	N/A
Calcium	2002	2.96 ppm	N/A
Carbonate Alkalinity	2005	0 ppm	N/A
Chloride	2005	54 ppm	250 ppm
Copper	2002	0.002 ppm	l ppm
Fluoride	2005	I,I ppm	2 ppm
Hardness (as Ca/Mg)	2002	8.14 ppm	N/A
Magnesium	2002	0.65 ppm	N/A
Manganese	2002	0.01 ppm	0.05 ppm
рН	2005	7.8	>7.0
Phenolphthalein Alkalinity	2005	0 ppm	N/A
Sodium	2002	200	N/A
Specific Conductance	2005	882 µmhos/cm	N/A
Sulfate	2005	9 ppm	300 ppm
Total Alkalinity	2005	376 ppm	N/A
Total Dissolved Solids	2005	523 ppm	1000 ppm

#### Assessing College Station's Source Water

The TCEQ has completed a Source Water Susceptibility Assessment (SWSA) for College Station's source water, and the results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for College Station's water system are based on this susceptibility and previous sample data. All contaminants that were detected through this sampling are described in this Drinking Water Quality Report. For more information on source water assessments and protection efforts at College Station Utilities, please contact Jennifer Nations at 764-6223 or **inations@cstx.gov**.



"College Station is committed to being a **leader in resource conservation** and protection of our environment.

### **Green College Station**

will express the City's commitment to achieve resource conservation and sustainability over the long-term."

College Station City Council
January 24, 2008

changes to our development ordinances, and instituting a conservation rate structure.

#### Solid, Hazardous Waste Reduction:

We will reduce the overall volume of waste generated in the community while developing environmentally sound and economically feasible means to dispose of waste. We will implement these strategies through aggressive public education programs and investing in alterative waste reduction programs.

#### Land use/Greenspace/Development:

We will develop specific strategies to promote efficient use of our land while protecting our natural resources. We will promote open and green space as a prominent component of our community character. We will achieve these strategies by focusing our comprehensive plan update around these concepts and amend our development ordinances to achieve the desired results.

#### Air Quality:

We will inventory global warming emissions in City operations and in

# What is Green College Station?

In January 2008, the College Station City Council approved the Green College Station concept for overall resource conservation and sustainability for College Station. The program is aimed at creating a sustained quality of life for local residents by bringing all environmental efforts together under one program.

Green College Station focuses efforts into five areas, each with specific objectives for achieving measurable results toward conservation:

#### Renewable & Efficient Energy:

We will include renewable green energy in a portion of our purchased power for resale to College Station Utility customers while reducing overall energy consumption. We will pursue these strategies through public education, ordinance revisions, incentive programs, and alternative rate strategies.

#### Water Conservation:

We will reduce our overall water consumption and develop mechanisms to reuse water in the community. We will implement our strategies through aggressive public education programs,

the community and set realistic reduction targets. We will accomplish this objective by promoting transportation options such as bicycle trails, commute trip reduction programs, and incentives for car pooling and public transit.

#### Why Green College Station?

There are many benefits to taxpayers, residents, and City operations from making College Station "green":

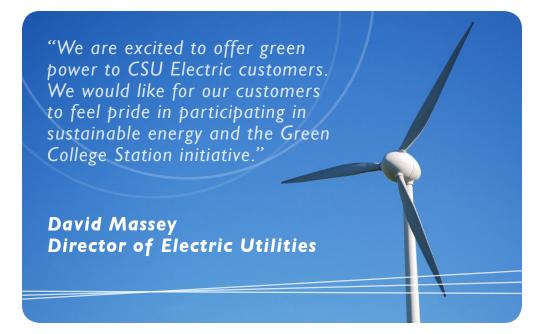
- Saves Taxpayer Dollars
- Supports Local Economy, Creates Jobs
- Improves Quality of Life
- Fosters Legacy of Leadership

A diverse group of City staff as well as a Technical Task Force made up of local residents with specific expertise in air quality, energy efficiency, green building, water conservation, and waste reduction have been working steadily on developing an Action Plan for Green College Station. The efforts of this team will promote Green College Station through:

- Aggressive public education programs
- Changes to ordinances
- Incentive programs
- Conservation-oriented rate structures
- Alternative waste reduction strategies
- Focus the Comprehensive Plan update on promoting open space

#### What's Next?

The Technical Task Force and Green College Station city staff group will develop this Action Plan and present it to the City Council and residents of College Station this fall. Read about these Green College Station projects that are already under way:



#### Water Reuse & Conservation

The Water Services Department is working to implement a water reuse system to irrigate athletic fields in City parks using recycled water from the Carter's Creek Wastewater Treatment Plant. Water reuse reduces demands on potable (drinking) water resources and provides a drought-resistant water supply for nonpotable water uses, such as irrigation of athletic fields.

When the water reuse system is fully built out to serve the Veterans Park and Athletic Complex and Central Park area, it will save over one million gallons of potable water per day in the summer. Supplying the top one third of irrigation water users in College Station with reuse water could save over **54 million gallons per year** of drinking water, which will ultimately reduce costs for both the water utility and the end user.

#### Renewable & Efficient Energy

The Winds of Change are Blowing! In January 2009, residential electric customers of College Station Utilities will have a renewable energy option through the City's new wind energy program.

Wind energy will be received from the South Trent Mesa Wind Project located west of Abilene. College Station will initially contract with AEP Energy Partners for 10 megawatts of capacity and will increase to 30 megawatts in 2015. The initial contract is projected to be able to fully supply approximately 3,000 residential customers of CSU in 2009.

Residential wind energy rates will be published in the fall of 2008. Participation in the renewable energy program will fund future conservation and renewable energy programs in College Station.





**INORGANIC CONTAMINANTS** 

Bromodichloromethane

Dibromochloromethane

Bromoform

Chloroform

20022002

2002

2002

### College Station Water is Safel

Independent laboratories certified by the EPA and State of Texas perform all required testing. All substances detected in routine testing are detailed below. All are below the Maximum Contaminant Level (MCL) and do not exceed the health-based standards for drinking water.

Vacu	Contoninent	Average	Minimarura	Massimasure	MCI	MCLC	Violetia -	Possible Course of Conteminant
Year Sampled	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Violation (Y or N)	Possible Source of Contaminant
2002	Barium	0.086 ppm	0.086 ppm	0.086 ppm	2 ppm	2 ppm	Ν	Discharge of drilling wastes; erosion of natural deposits
2002	Chromium	1.4 ppb	0 ppm	2.9 ppb	100 ppb	100 ppb	Ν	Erosion of natural deposits
2007	Fluoride	0.48 ppm	0.10 ppm	1.06 ppm	4 ppm	2 ppm	Ν	Water additive to promote strong teeth; erosion of natural deposits
2007	Nitrate	0.04 ppm	0.04 ppm	0.04 ppm	10 ppm	10 ppm	Ν	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
DISINFE	CTANT RESID	UAL						
Year Sampled	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Violation (Y or N)	Source of Disinfectant
2007	Chlorine	1.6 ppm	2.06 ppm	0.94 ppm	4 ppm	N/A	Ν	Water additive to control microbes
DISINFE	CTION BY-PR	ODUCTS						
Year Sampled	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Violation (Y or N)	Source of Contaminant
2007	Total Triha- Iomethanes	20.2 ppb	20.2 ppb	20.2 ppb	80 ppb	N/A	Ν	Byproduct of drinking water disinfection
2007	Haloacetic Acids	1.8 ppb	1.8 ppb	I.8 ppb	60 ppb	N/A	Ν	Byproduct of drinking water disinfection
COLIFOR	RMS							
Year Sampled	Contaminant		Highest Mo Positive Sar		MCL	MCLG	Violation (Y or N)	Possible Sources of Contaminant
2007	Total Coliform *presence of Total (		1.10 % al in ≥ 5% of sc	ımples in one m	* nonth	0	Ν	Naturally present in the environment
LEAD A	ND COPPER*							
Year Sampled	Contaminant	90th Percentile	Sites Excee Action Leve		Action L	evel	Violation (Y or N)	Possible Source of Contaminant
2007	Lead	2.1 ppb	0		15 ppb		Ν	Corrosion of household plumbing systems erosion of natural deposits
2007	Copper	0.127 ppb	0		1.3 ppm		Ν	Corrosion of household plumbing systems erosion of natural deposits; leaching from wood preservatives
UNREGL	JLATED CONT	AMINANT	S					
Year Sampled	Contaminant				Range D	etected		Possible Sources of Contaminant

<sup>\*</sup>The Lead and Copper results in this year's report are based on 30 samples collected for the last monitoring, in August 2007. The 90th Percentile based on these samples is 2.1 ppb for lead and 0.127 ppm for copper. 90% of College Station tap water samples collected were at or below these levels. EPA considers the 90th percentile the same as an "average" value for other contaminants. If more than 10% of tap water samples collected exceed the action level for lead or copper, water systems must take additional treatment measures. For more information on source water assessments and protection efforts in College Station, please call us at 979-764-3660 or email jnations@cstx.gov



1.3ppb-4.3ppb

4.1pp-11.9ppb

3.1ppb-12.1ppb

**Ippb** 



Byproduct of drinking water disinfection

## WORD SEARCH

Using the clues below, see if you can find words in the word bank that will help you learn more about how only tap water delivers.

fire hydrants	economy	quality	infrastructure
United States	billion	fire protection	safety



#### Clues

- 1. Our local water utility maintains fire hydrants.
- 2. A period of time with little or no rainfall is called a drought.
- 3. Pipes run underground and make up the infrastructure of the water system.
- 4. Tap water protects us against the threat of fire.
- 5. Safe tap water contributes to quality of life by increasing productivity and safety.
- 6. Water utilities provide their customers with a report on the quality of their drinking water each year.
- 7. Did you know the first water systems in North America were built to provide fire protection?
- 8. Only tap water delivers public health protection, fire protection, support for the *economy* and the quality of life we enjoy.
- 9. Replacing old pipes in the United States is expected to cost more than 250 *billion* dollars over the next 20 years.
- 10. In 2004, U.S. fire departments responded over to one million fires across the *United States*.





drought fire

#### **COLLEGE STATION UTILITIES**

**Quick Reference Guide** 

#### **UTILITY SERVICE CENTER**

Mapping, Field Operations, Administration (979) 764-3660 1601 Graham Road, P.O. Box 9960 College Station, TX 77842

#### UTILITY CUSTOMER SERVICE

Bill payment, connect/disconnect utilities (979) 764-3535 • I-800-849-6623 310 Krenek Tap Road, P.O. Box 10230 College Station, TX 77842-0230 www.epay.cstx.gov

#### AFTER HOURS / EMERGENCY

Line breaks, sewer backups, power outages (979) 764-3638 [24-hrs]

#### WATER CONSERVATION / PUBLIC EDUCATION

Presentations, field trips, water conservation tips (979) 764-6223

#### **ENVIRONMENTAL SERVICES**

Water Quality, Backflow Prevention, Grease/Grit Trap Inspections (979) 764-3660

#### **ENERGY CONSERVATION**

Audits, rebates, conservation tips (979) 764-3724 • 764-6274

EN ESPAÑOL: Este reporte incluye información importante sobre el agua para tomar. Para asistancia en español, favor de llamar al telefono (979) 764-3433.



## Learn It!

#### KNOW THE H<sub>2</sub>O LINGO

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Micromhos per centimeter: A measure of the electrical conductivity of a water sample. Pure water has a conductivity of 0.005 micromhos per centimeter at 25° Celsius.

Parts per billion (ppb): One microgram per liter.

Parts per million (ppm): One milligram per liter (mg/L).

pH: The pH scale extends from 0--very acidic, to 14--very alkaline or basic. A pH of 7 is neutral. Most natural waters fall within the range of 4 to 9.

Secondary Maximum Contaminant Level (SMCL): The level of a contaminant that represents reasonable goals for drinking water quality. SMCLs pertain to contaminants that primarily affect the aesthetic qualities relating to drinking water.



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